

1. Find

a. $\sec\left(\frac{11\pi}{4}\right)$

b. $\sin\left(\frac{5\pi}{3}\right)$

c. Find all values of θ from $[0, 2\pi]$
where $\cos \theta = \frac{\sqrt{3}}{2}$

2. Graph $y = 2 \cos\left(\frac{x}{2}\right) + 3$

3. If $\tan \theta = \frac{15}{8}$ and $\pi \leq \theta \leq \frac{3\pi}{2}$, find the other 5 trigonometric ratios

4. Verify the given trig identity:

1. $\cos x + \sin x \tan x = \sec x$

2. $\frac{1-\sin x}{\cos x} + \frac{\cos x}{1-\sin x} = 2 \sec x$

3. $(\tan x + 1)^2 = \frac{1+2 \sin x \cos x}{\cos^2 x}$